

Club Drugs

MDMA (ecstasy), Rohypnol, GHB, and ketamine are among the drugs used by teens and young adults who are part of a nightclub, bar, rave, or trance scene. Raves and trance events are generally night-long dances, often held in warehouses. Many who attend raves and trances do not use club drugs, but those who do may be attracted to their generally low cost, and to the intoxicating highs that are said to deepen the rave or trance experience.

For 2005, hospital emergency department mentions were estimated at 10,752 for MDMA use, 1,861 for GHB, and 275 for ketamine.*

MDMA (Ecstasy) —————

MDMA (3-4 methylenedioxymethamphetamine) is a synthetic, psychoactive drug chemically similar to the stimulant methamphetamine and the hallucinogen mescaline. Street names for MDMA include "ecstasy," "XTC," and "hug drug." In high doses, MDMA can interfere with the body's ability to regulate temperature. On rare but unpredictable occasions, this can lead to a sharp increase in body temperature (hyperthermia), resulting in liver, kidney, and cardiovascular system failure, and death. Because MDMA can interfere with its

own metabolism (breakdown within the body), potentially harmful levels can be reached by repeated drug use within short intervals.

Research in animals links MDMA exposure to long-term damage to serotonin neurons. A study in nonhuman primates showed that exposure to MDMA for only 4 days caused damage of serotonin nerve terminals that was evident 6 to 7 years later. While similar neurotoxicity has not been definitively shown in humans, the wealth of animal research indicating MDMA's damaging properties suggests that MDMA is not a safe drug for human consumption.

According to the Monitoring the Future** (MTF) survey, NIDA's annual survey of drug use and associated attitudes among the Nation's 8th-, 10th-, and 12th-graders, past year*** use of MDMA was reported by 1.4 percent of 8th-graders, 2.8 percent of 10th-graders, and 4.1 percent of 12th-graders in 2006. Although these figures represent significant reductions in use since the peak year in 2001, trends in use have remained relatively stable over the past 3 years among these grade cohorts.

Results from the current survey represent the second year in a row showing a

weakening of attitudes among the youngest of students regarding MDMA. The proportion of 8th-graders reporting perceived risk of harm from using MDMA once or twice decreased significantly, from 40 percent in 2005 to 32.8 percent in 2006, and perceived harm from using it occasionally dropped from 60.8 percent to 52.0 percent. Disapproval of use also decreased significantly among 8th-graders for both trying MDMA once or twice and for taking it occasionally.

Another national survey, the National Survey on Drug Use and Health (NSDUH),**** reported 502,000 current ecstasy users in 2005. While lifetime use increased among those 12 or older from 2002 to 2005, there were significant declines in lifetime use from 2004 to 2005 among those 12 to 17 (within that age group the significant declines were for those age 14 or 15 and 16 or 17). Other 2005 NSDUH results show significant increases in past month use among females and declines in past year use among those 12 or older.

Approximately 615,000 Americans used ecstasy for the first time in 2005. The majority of these new users were 18 or older (65.9 percent), and among those initiating between the ages of 12 and 49, the average age was 20.7 years.

GHB, Ketamine, and Rohypnol ———

GHB and Rohypnol are predominantly central nervous system depressants. Because they are often colorless, tasteless, and odorless, they can be added to beverages and ingested unknowingly.

These drugs emerged several years ago as "date rape" drugs.***** Because of concern about their abuse, Congress passed the "Drug-Induced Rape Prevention and Punishment Act of 1996" in October 1996. This legislation increased Federal penalties for use of any controlled substance to aid in sexual assault.

GHB

Since about 1990, GHB (gamma hydroxybutyrate) has been abused in the U.S. for its euphoric, sedative, and anabolic (body building) effects. It is a central nervous system depressant that was widely available over-the-counter in health food stores during the 1980s and until 1992. It was purchased largely by body builders to aid in fat reduction and muscle building. Street names include "liquid ecstasy," "soap," "easy lay," "vita-G," and "Georgia home boy."

Coma and seizures can occur following use of GHB. Combining use with other drugs such as alcohol can result in nausea and breathing difficulties. GHB may also produce withdrawal effects, including insomnia, anxiety, tremors, and

sweating. GHB and two of its precursors, gamma butyrolactone (GBL) and 1,4 butanediol (BD), have been involved in poisonings, overdoses, date rapes, and deaths.

According to the 2006 MTF survey, 0.8 percent of 8th grade students reported past year use of GHB, as did 0.7 percent and 1.1 percent of students in grades 10 and 12, respectively.

Ketamine

Ketamine is an anesthetic that has been approved for both human and animal use in medical settings since 1970; about 90 percent of the ketamine legally sold is intended for veterinary use. It can be injected or snorted. Ketamine is also known as "special K" or "vitamin K."

Certain doses of ketamine can cause dream-like states and hallucinations. In high doses, ketamine can cause delirium, amnesia, impaired motor function, high blood pressure, depression, and potentially fatal respiratory problems.

Past year ketamine use was reported among 0.9 percent of 8th-graders, 1.0 percent of 10th-graders, and 1.4 percent of 12th-graders in 2006. These results were reported in the latest survey from MTF.

Rohypnol

Rohypnol, a trade name for flunitrazepam, belongs to a class of drugs

known as benzodiazepines. When mixed with alcohol, Rohypnol can incapacitate victims and prevent them from resisting sexual assault. It can produce "anterograde amnesia," which means individuals may not remember events they experienced while under the effects of the drug. Also, Rohypnol may be lethal when mixed with alcohol and/or other depressants.

There was no significant change in illicit use of this drug from 2005 to 2006, according to 2006 MTF results. However, the authors recorded a significant decline in Rohypnol use among 10th-graders since peak years measured. Lifetime use among this grade cohort decreased from 2.0 percent in 1998 (peak year) to 0.8 percent in 2006, and past year use declined from 1.3 percent in 1997 to 0.5 percent in 2006.

Rohypnol is not approved for use in the United States, and its importation is banned. Illicit use of Rohypnol started appearing in the United States in the early 1990s, where it became known as "rophies," "roofies," "roach," and "rope."

Abuse of two other similar drugs appears to have replaced Rohypnol abuse in some regions of the country. These are clonazepam, marketed in the U.S. as Klonopin and in Mexico as Rivotril, and alprazolam, marketed as Xanax.

For more science-based information on MDMA and other club drugs, visit www.ClubDrugs.org, www.Teens.drugabuse.gov, and

www.BacktoSchool.drugabuse.gov; or call the National Clearinghouse for Alcohol and Drug Information at 800-729-6686.

* These data are from the annual Drug Abuse Warning Network, funded by the Substance Abuse and Mental Health Services Administration, DHHS. The survey provides information about emergency department visits that are induced by or related to the use of an illicit drug or the nonmedical use of a legal drug. The latest data are available at 800-729-6686 or online at www.samhsa.gov.

** These data are from the 2006 Monitoring the Future survey, funded by the National Institute on Drug Abuse, National Institutes of Health, DHHS, and conducted annually by the University of Michigan's Institute for Social Research. The survey has tracked 12th-graders' illicit drug use and related attitudes since 1975; in 1991, 8th- and 10th-graders were added to the study. The latest data are online at www.drugabuse.gov.

*** "Lifetime" refers to use at least once during a respondent's lifetime. "Past year" refers to use at least once during the year preceding an individual's response to the survey. "Past month" refers to use at least once during the 30 days preceding an individual's response to the survey.

**** NSDUH (formerly known as the National Household Survey on Drug Abuse) is an annual survey of Americans age 12 and older conducted by the Substance Abuse and Mental Health Services Administration. Copies of the latest survey are available at www.samhsa.gov and from the National Clearinghouse for Alcohol and Drug Information at 800-729-6686.

***** Also known as "drug rape," "acquaintance rape," or "drug-assisted" assault.